The fragments of the remainder of the stem show that it continued to taper until it reached a mean diameter of about 2·2 mm. This was probably at a distance of about 15 mm. from the cup. After that, the stem gradually increased in diameter, until at a few millimetres above the root the mean diameter is 4·3 mm., and 4·1 mm. immediately above the branching of the root.

Near the root the stem is slightly quinquelobate, the lobes corresponding with the pentameres. The section at the broken end of the fragment attached to the cup is neither circular nor sub-circular, but clearly subpentagonal, the convexities corresponding with the pentameres (Plate I, fig. 8.)

Just above the root the average height of a pentamere is 0·45 mm. In a region where the mean diameter is 3·35, the average height of a pentamere is 0·58. In this region, however, the pentameres alternate in thickness.

Even in the distal region the pentameres of one vertical section do not alternate or interlock quite evenly with those of the adjacent sections, but one of the end-slopes of each pentamere is shorter than the other. In the region where the pentameres alternate in thickness, the relations of the sections are still less regular, for a thick pentamere may abut at one or both of its ends on one thin and two thick pentameres of the adjacent section, so that its outline is 7- or 8-sided instead of 6-sided. This is shown in the enlarged figure of a suture by Billings (1887) and in our fig. 9 (Plate I). Thus the centres of adjacent pentameres come to lie at the same level, and the transition to regularly abutting pentameres of equal size is easy.

In the distal region the upper and lower joint-faces of the pentameres are marked with striæ formed of concresced granules (Plate I, fig. 7). The striæ radiate towards the periphery, branching slightly as they go. The same arrangement is visible in the middle region. Nearer the cup the striæ become coarser and change into distinct ridges (Plate I, fig. 6). These ridges then shorten at their adcentral ends, especially near the middle line of each pentamere, so that there is left a smooth or fairly granular area of rather indistinct petaloid shape. This area increases at the expense of the ridges as the cup is approached, and on the under joint-face of each pentamere it seems occa-